

Remarks/Arguments

Applicants thank Examiner Dang for the careful examination of this application and for the clear explanation of the claim rejections.

In response to the Office action, applicants amend claims 5-11 to overcome the obviousness rejections:

Claim 5, as amended, describes an apparatus that comprises a computer-controlled chamber and a transport system connecting the entry and exit of the chamber; and a computer-controlled reflow station connecting to the chamber. The reflow station has a reflow-temperature profile of which the end-point temperature is higher than room-temperature. Further, the internal temperature of the computer-controlled chamber is comparable to the end-point temperature. The cited references in the Office action do not disclose all the above limitations

The Yoo patent (US 6,591,161) discloses a robot wafer alignment tool. It does not disclose a reflow station connected to a chamber; it does not disclose the reflow station maintaining a temperature profile of which the end-point temperature is higher than room-temperature; and it does not disclose the chamber temperature as comparable to the end-point temperature of the reflow station.

The Grutzediek patent (US 5,779,425) discloses a technique for handling wafers of integrated circuit. It does not disclose a reflow station connected to a chamber; it does not disclose the reflow station maintaining a temperature profile of which the end-point temperature is higher than room-temperature; and it does not disclose the chamber temperature as comparable to the end-point temperature of the reflow station.

Because both patents fail to disclose the limitations in claim 5, they do not render claim 5 obvious and claim 5 stands patentable over the patents.

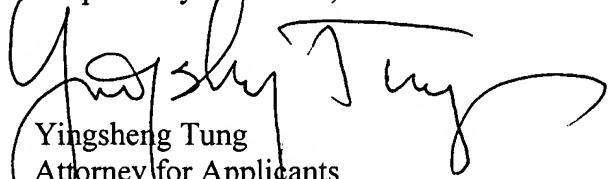
Claims 6-11 properly depend from claim 5 and stand patentable at least by virtue of their dependency. In addition, claims 6-10 further include limitations not disclosed in the references: claim 6 further discloses the computer-controlled humidity in the chamber; claim 7 further discloses the product as being a flip-chip semiconductor device on a substrate; claim

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8 further discloses the chamber as comprising horizontally rotatable carousels adapted to carry flip-chip semiconductor devices on substrates; claim 9 further discloses the chamber as comprising vertically rotatable wheels adapted to carry flip-chip semiconductor devices on substrates; and claim 10 further discloses the chamber as comprising elongated conveyor systems adapted to carry flip-chip semiconductor.

In conclusion, applicants respectfully submit that this application is in allowable form; the pending claims 5-11 stand patentable because the cited references fail to disclose all the limitations in the claims. Applicants respectfully request further examination of this application and timely allowance of the pending claims.

Respectfully submitted,



Yingsheng Tung
Attorney for Applicants
Reg. No. 52,305

Texas Instruments Incorporated
P. O. Box 655474 MS 3999
Dallas, TX 75265
(972)917-5355